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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,778	09/30/2003	Jerry Waikit Tsui	CA920020061US1	4447

25259 7590 11/26/2007

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EXAMINER	
SNEED, KWELLI D	

ART UNIT	PAPER NUMBER
4172	

NOTIFICATION DATE	DELIVERY MODE
11/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

RSWIPLAW@us.ibm.com

Office Action Summary	Application No.	Applicant(s)	
	10/674,778	TSUI ET AL.	
	Examiner	Art Unit	
	Kwelli D. Sneed	4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/30/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Applicant makes reference in Claim 17 to a "lightweight," billing engine. Examiner needs applicant to define "lightweight". It is not explained in the specification so that one of ordinary skill could enable the claim.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 of the claimed invention is directed to non-statutory subject matter. Claim 1 references "a software system" and places emphasis on the software versus the necessary computer hardware that is needed to execute the software, for instance computer readable medium and/or etc.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim1-2, 5-7, 10-12,and 15-17 are rejected under 35 U.S.C. 102(b) as being unpatentable by Reeder at al (US Patent Number 5,852,812).

As per Claim 1, Reeder et al (US Patent Number 5,852,812) teaches A software system for use in providing a web service interface for a billing service, wherein a plurality of first billing functions is provided by said billing service to computing applications residing on one or more computing devices in a distributed network, the software system comprising:

a. a web service interface defined for a billing service, said web service interface being adapted for coupling to a billing engine, said billing engine residing on a computing device in said distributed network and being adapted to perform said plurality of first billing functions, said web service interface comprises a plurality of application programming interfaces, each of said application programming interfaces being associated with a first billing function and being implemented such that the first billing function associated therewith is performed after a web service invocation that commands performance of said first billing function is received by said web service interface see, (col. 2, lines 40-45); and

b. a plurality of object classes, each of said object classes defining objects for storing data utilized by said billing engine and for communicating said data to said billing engine through at least one implemented application programming interface of said web service interface, said web service interface being used to provide said billing service as a web service that can be invoked by said computing applications in said distributed network, see (col. 4, lines 35-45).

As per Claim 2, Reeder teaches a system wherein said web service interface is extendable to provide said computing application with a plurality of second billing functions, and said billing engine is adapted to perform said second billing functions, see (col. 10 lines 30-40).

As per Claim 5, Reeder et al, (US Patent Number 5,852,812) teaches a system wherein said plurality of object classes define one or more of the following objects: billing accounts; billing events; billing rate packages; billable services; billing subscriptions; and billable service instances(col. 12, lines 20- 27).

As per Claim 6, Reeder (US Patent Number 5,852,812) teaches a computer-readable medium upon which a set of software components is stored, said software components for use in providing a web service interface for a billing service, wherein a plurality of first billing functions is provided by said billing service to computing applications residing on one or more computing devices in a distributed network, the set of software components comprising:

a. a web service interface for a billing service, said web service interface being adapted to be coupled to a billing engine, said billing engine residing on a computing device in said distributed network and being adapted to perform said plurality of first billing functions, said web service interface comprising a plurality of application programming interfaces, each of said application programming interfaces being associated with a first billing function, each of said application programming interfaces being implemented

such that the first billing function associated therewith is performed after a web service invocation that commands performance of said first billing function is received by said web service interface see, (col. 2, lines 40-45); and

b. a plurality of object classes, each of said object classes defining objects for storing data utilized by said billing engine and for communicating said data to said billing engine through at least one implemented application programming interface of said web service interface, said web service interface being used to provide said billing service as a web service that can be invoked by said computing applications in said distributed network see, (col. 4, lines 35-45).

As per Claim 7, Reeder et al. (US Patent Number 5,852,812) teaches wherein said web service interface is extendable to provide said computing application with a plurality of second billing functions, and said billing engine is adapted to perform said second billing functions (col. 10 lines 30-40).

As per claim 10, Reeder et al (US Patent Number 5,852,812) teaches the computer-readable medium as claimed in claim 6, wherein said plurality of object classes define one or more of the following objects: billing accounts; billing events; billing rate packages; billable services; billing subscriptions; and billable service instances, see (col. 12, lines 20- 27).

As per Claim 11, Reeder (US Patent Number 5,852,812) teaches a web service interface for a billing service for providing a plurality of first billing functions to computing applications residing on one or more computing devices in a distributed network, and wherein: a) said web service interface is adapted for coupling to a billing engine; b) said billing engine resides on a computing device in said distributed network and is adapted to perform said plurality of first billing functions;

c) said web service interface comprises a plurality of application programming interfaces;

d) each of said application programming interfaces is associated with a first billing function; and e) each of said application programming interfaces can be implemented such that the first billing function associated therewith is performed after a web service invocation that commands performance of said first billing function is received by said web service interface; whereby said web service interface is used to provide said billing service as a web service that can be invoked by said computing applications in said distributed network see, (col. 2, lines 40-45 and col. 4, lines 35-45) .

As per Claim 12, Reeder et al, teaches wherein said web service interface is extendable to provide said computing application with a plurality of second billing functions, wherein said billing engine is adapted to perform said second billing functions (col. 10 lines 30-40).

As per Claim 15, Reeder et al (5,852,812) teaches, wherein data is communicated to said billing engine through at least one implemented application programming interface

of said web service interface in at least one object selected from the following group: billing account object; billing event object; billing rate package object; billable service object; billing subscription object; and billing service instance object- the billing event, see (col. 12, lines 20- 27).

As per Claim 16, Reeder (US Patent Number 5,852,812) teaches The use of a billing service for which a web service interface is defined, wherein a plurality of billing functions is provided by said billing service to computing applications residing one on or more computing devices in a distributed network, and wherein:

a) said web service interface is adapted for coupling to a billing engine see, (col. 2, lines 46-51);

b) said billing engine resides on a computing device in said distributed network and is adapted to perform said plurality of first billing functions see (col. 2, lines 60-64);

c) said web service interface comprises a plurality of application programming interfaces see (col. 6, lines 45-61);

d) each of said application programming interfaces is associated with a first billing function see, col. 6, lines 58- 61; and

e) each of said application programming interfaces can be implemented such that the first billing function associated therewith is performed after a web service invocation that commands performance of said first billing function is received by said web service interface; whereby said web service interface is used to provide said billing service as a web service that can be invoked by said computing applications in said distributed

network see, col. 6, lines 58-67 and col. 7, lines 1-2).

As per Claim17, Reeder (US Patent Number 5,852,812) teaches the use of a billing service, wherein the first billing functions of said billing service are performed by a lightweight billing engine see, col.9, lines 58-65).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeder et al (US Patent Number 5, 852, 812) in view of Crooks et al (US Patent Number 5,943,656).

As per Claim 3, Crooks et al (US Patent Number 5,943,656), teaches a software system wherein said billing service is a billing account service, and wherein the web service interface defined for said billing account service comprises application programming interfaces associated with at least one of the following first billing functions:

i. creating billing accounts see, col. 4, lines 55-60);

ii. deleting billing accounts see, col. 4, lines 55-60);

iii. creating records of billing events in a billing account see, (col. 5, lines 35-36);

iv. setting the status of a billing account see, (col. 5, lines 36-40);

v. obtaining the status of a billing account see,(col. 5, lines 36-40); and

vi. obtaining an invoice for a billing account see, (col. 6, lines 13-15).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the inventions set forth by Reeder and Crooks to create a computerized billing system that includes information regarding the billable entity from which payment is to be received is stored onto a database.

As per Claim 8, Crooks et al (US Patent Number 5,943,656), teaches The computer-readable medium wherein said billing service is a billing account service, and the web service interface defined for said billing account service comprises application programming interfaces associated with one or more of the following first billing functions:

i. creating billing accounts see, col. 4, lines 55-60);

ii. deleting billing accounts see, col. 4, lines 55-60);

iii. creating records of billing events in a billing account see, (col. 5, lines 35-36);

iv. setting the status of a billing account see, (col. 5, lines 36-40);

v. obtaining the status of a billing account see,(col. 5, lines 36-40); and

vi. obtaining an invoice for a billing account see, (col. 6, lines 13-15).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the inventions set forth by Reeder and Crooks to create a computerized billing system that includes information regarding the billable entity from

which payment is to be received is stored onto a database.

As per Claim 13, Crooks et al (US Patent Number 5,943,656) teaches The web service interface as claimed in claim 11, wherein said billing service is a billing account service, and wherein the web service interface defined for said billing account service comprises application programming interfaces associated with the following first billing functions:

i. creating billing accounts see, col. 4, lines 55-60);

ii. deleting billing accounts see, col. 4, lines 55-60);

iii. creating records of billing events in a billing account see, (col. 5, lines 35-36);

iv. setting the status of a billing account see, (col. 5, lines 36-40);

v. obtaining the status of a billing account see,(col. 5, lines 36-40); and

vi. obtaining an invoice for a billing account see, (col. 6, lines 13-15).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the inventions set forth by Reeder and Crooks to create a computerized billing system that includes information regarding the billable entity from which payment is to be received is stored onto a database.

6. Claims 4, 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeder et al (US Patent Number 5, 852, 812) in view of Official Notice.

As per Claim 4, Examiner is taking **Official Notice** is being taken on the following: a system wherein said billing service is a rating service, and wherein the web service

interface defined for said rating service comprises application programming interfaces associated with the following first billing functions; obtaining a billing rate package for a billable service; obtaining subscribed billable service instances for a billing account; and processing billing events, registering billable services; subscribing a billable service for a billing account; unsubscribing a billable service for a billing account.

To one of ordinary skill in the art knows that it is well known in the art of business methods that in order to participate in web based billing systems, the payee must authorize permission to participate by registering to participate in the billing service and have subscribed to a particular service or billing entity. It is also well known in the art that the billing entity has established a rate for the billable service and that is applied to all billable events that occur utilizing the service

As per Claim 9, Examiner is taking **Official Notice** is being taken on the following: a computer-readable medium wherein said billing service is a rating service, and wherein the web service interface defined for said rating service comprises application programming interfaces associated with the following first billing functions; obtaining a billing rate package for a billable service; obtaining subscribed billable service instances for a billing account; and processing billing events, registering billable services; subscribing a billable service for a billing account; unsubscribing a billable service for a billing account.

To one of ordinary skill in the art knows that it is well known in the art of business methods that in order to participate in web based billing systems, the payee must authorize permission to participate by registering to participate in the billing service and have subscribed to a particular service or billing entity. It is also well known in the art that the billing entity has established a rate for the billable service and that is applied to all billable events that occur utilizing the service.

As per Claim 14, Examiner is taking **Official Notice** is being taken on the following: wherein said billing service is a rating service, and wherein the web service interface defined for said rating service comprises application programming interfaces associated with the following first billing functions; obtaining a billing rate package for a billable service; obtaining subscribed billable service instances for a billing account; and processing billing events registering billable services; subscribing a billable service for a billing account; unsubscribing a billable service for a billing account.

To one of ordinary skill in the art knows that it is well known in the art of business methods that in order to participate in web based billing systems, the payee must authorize permission to participate by registering to participate in the billing service and have subscribed to a particular service or billing entity. It is also well known in the art that the billing entity has established a rate for the billable service and that is applied to all billable events that occur utilizing the service.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Kwelli D. Sneed whose telephone number is (571) 270-3446. The examiner can normally be reached Monday –Thursday 7:00 am 4:40 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas A. Dixon can be reached on (571) 272-6708.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status Information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. Should you have any questions about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kwelli D. Sneed
Examiner
Art Unit 4172

/Thomas A Dixon/
Supervisory Patent Examiner, Art Unit 4172